

FRAMEWORK FOR HANDLING DEVELOPMENT OF PROPERTIES WHICH CONTAIN SOLID WASTE

INTRODUCTION

The purpose of this paper is to lay out the general concepts that the Streamlining Team has developed for handling redevelopment of properties in which both the Waste and Remediation programs are involved due to the presence of solid waste. This process, as it is laid out, is not currently aimed at the remediation or development of sites where contamination may be present from spills of hazardous substances (those types of sites are and will still be handled under the NR 700 process).

PRINCIPLES

The approach described below is based on a number of considerations.

- First, there is a recognition that properties affected by the NR 506 ban on building on abandoned landfills range from small volumes of relatively inert materials placed as fill on a property prior to the advent of solid waste regulations, to large, modern landfills. The range of risk represented by these extremes should be reflected in the level of regulation we apply as well as the environmental benefits that may occur through development (ie. Capping areas that previously had no cap.). Situations which present little risk to human health and the environment should be the responsibility of the property owner with little or no DNR staff involvement, while situations that involve greater risk should involve commensurate DNR oversight.
- Second, it must be clear to both RPs/developers and internal staff what DNR program will have the lead responsibility and what process will be followed. Generally we recommend that a consistent program lead be maintained throughout the process, that the direction provided in the April 30, 1997 report titled "Programmatic Responsibility for Solid Waste Landfills with Contamination" be followed where possible, and that staff from other relevant programs become involved on an as-needed basis.
- Third, we wanted to develop ideas that could be implemented in the short term and supplemented later by rule making.

CATEGORIZATION

We split the universe of sites into 3 categories:

- 1) *Unlicensed(historic fill) sites.* This is anticipated to be the largest category of sites and, in general, would pose a wide range of environmental and safety risks.. It would also represent the most common situation for a site redevelopment. This includes situations where development has begun and waste is discovered during excavation, situations where waste is discovered during an environmental assessment process, and historic landfills that stopped filling or accepting waste prior to the beginning of DNR's landfill licensing efforts in 1970. Although this category would generally contain the lowest risk sites, it may also contain some of the more complex and higher risk sites (ie Law Park in Madison, Miller Park Stadium in Milwaukee ,coal gas sites, etc.).
- 2) *Sites that were initially licensed as landfills before 1978.* This would generally include the Town and Village landfills that were less than 50,000 cubic yards and open burned their waste, larger city and privately owned landfills developed prior to 1978 and industrial waste monofills (coal ash, foundry sand and papermill sludge) developed prior to 1978. Many of these landfills have groundwater monitoring wells and some have engineered caps and may have previous Waste Management Program involvement.
- 3) *Sites that were initially licensed as landfills after 1978.* These are sites that meet the statutory definition of "approved". This includes all landfills which received their initial license after May 21, 1978 (and includes a few sites which were initially licensed between 1975 and 1978 and were determined by DNR to substantially meet the 1978 standards), maintain financial responsibility, and in most cases have a liner, leachate collection system and engineered cap. Development on or adjacent to these sites would generally present the greatest risk of causing

environmental harm due to the generation of gases and reduction in volume due to decomposition.

PROGRAM LEAD

In order to provide continuity to our external customers, we believe that the lead program contact for a site should remain throughout the life of the development project for Categories 1 (RR lead) and 3 (Waste lead). For Category 2 sites, the Waste Program would have the lead up to the point where an evaluation of contamination is made. If it is determined that an investigation is necessary, the lead would switch to the RR Program. This division of responsibilities is consistent with the April 30th, 1997 report "Programmatic Responsibility for Solid Waste Landfills with Contamination" that provides direction for which program has the lead responsibility.

PROGRAM COOPERATION

Although the program lead is specified by the category the site falls into, it is imperative that all situations are handled consistently and in accordance with the rules and policies of both programs. In general, this means that both programs will follow the same process and communicate significant decisions. On specific projects it will be necessary for the lead program to request assistance from the other program to take advantage of that program's expertise and maintain a consistent approach. Situations for which a team approach would be appropriate include large landfills in Category 1 and landfills in category 2, particularly those with engineering features (eg. caps), or sites with an on-going environmental monitoring program.

GENERAL APPROACH

Category 1: The first step for a category 1 site is to determine the site's risk level. This may be done by sampling and testing to characterize the site conditions and determine contaminant levels in the waste. In very simple cases where the waste is a small volume of known waste and there are no sensitive environmental factors (proximity to groundwater, etc.) knowledge may be appropriate to presume that no release has occurred. The more common case will involve some level of waste characterization, soil sampling, groundwater monitoring or gas monitoring. If an environmental or human health and safety problem does not exist at the site and the development will not cause a future problem in these areas (see the EDUCATION section below) then the developer would be eligible for an expedited exemption (see the EXPEDITED EXEMPTION section below). If a release were discovered, then the developer would need to determine the degree and extent of contamination by following the requirements of NR 716. A staff person from the Waste program may be assigned to assist with these sites, where appropriate.

Category 2: The same approach as laid out in Category 1 should be followed except that a staff member of the RR program would be assigned to assist the Waste program lead (facilitating continuity on the project if the lead program changes).

Category 3: The exemption to build on a category 3 landfill would require the issuance of a plan modification by the Waste Program.

EXPEDITED EXEMPTION

The ultimate goal for simple, low risk situations is to develop rule criteria under which the prohibition from building on an abandoned landfill would not apply. The exemption would be predicated on the developer establishing that there is no current significant environmental impact or human health and safety problem and that the proposed development will not cause a future significant problem in these areas. The exemption rule language would contain specific performance standards similar to NR 504.04(4), which would include such things as no detrimental affect on groundwater, surface water, critical habitat, and wetlands, and no migration of explosive or toxic gasses.

Since rule criteria would take considerable time to develop and implement, for the short term we could develop an expedited exemption which would be issued on a case by case basis but would be a standardized format. This was done in the beneficial use program as an interim measure while NR 538 was developed. In the case of the beneficial use exemptions, we specified information (waste characterization, proposed use, etc.) that was necessary for us to review the proposal and determine if the expedited exemption process was appropriate (case by case reviews with customized exemptions were still available but took longer to review and process). In the case of the "building on abandoned landfill" expedited exemption, we would specify submittal of information on a Department supplied form documenting how the developer determined that there were no existing significant impacts, how development related impacts

would be prevented, the nature of the proposed development, etc. One concern is that the developer may state that the above conditions have been met without having the technical basis to make that determination. To prevent this situation, we would require that the exemption application be submitted by a PE or PG, and require a certification that “to the best of their professional judgment” the site has been adequately characterized and should not violate any of the performance standards.

The location of sites receiving an exemption, would be recorded on a tracking system.

EDUCATION

A critical step in streamlining the process for development of property where waste has been deposited requires development of a number of informational items.

- First, the general process that a developer needs to follow should be clearly laid out in easy to understand language. This will help the developer to understand what the development will entail as far as risk and cost, and avoid unknown surprises in the regulatory process (the site investigation will help reduce unknown surprises with the environmental conditions).
- Second, we need to develop a clear explanation of the types of environmental and safety concerns that may be involved in development of a property that contains solid waste. And, having raised the flag of what can go wrong, we also need to suggest ways of designing around or compensating for situations that could cause environmental problems. Much of this information currently exists in the “Building on Abandoned Landfill” guidance document, but it will need to be reformatted and updated.
- Third, we need to develop information to supplement existing site characterization guidance (guidance that has already been developed for spills and tank releases) that addresses the waste aspects of the site investigation. This information should also discuss the potential liabilities that could be involved if the site is not characterized adequately before development.

TERMINOLOGY

The development community has raised concerns as part of the Brownsfield Study process regarding the use of the word “landfill”. They believe that having the label “landfill” attached to a property is perceived as an unnecessary impediment to development. Particularly in cases that fall into Category 1, the landfill label may be misleading. DNR’s concern is that properties where waste has been deposited be investigated to determine if there has been a release to the environment, and that further development will not cause an environmental or safety problem. In NR 538 we had a similar terminology concern. It was believed that contractors would not be willing to beneficially use materials that carried the solid waste label. To alleviate that “perception” concern we adopted the term “industrial by-product” and defined it as “...nonhazardous solid waste...”. This allowed us to avoid the perception problem but continue to apply relevant regulations. We should work with the development community to find an acceptable term other than “landfill” for sites that were never licensed as landfills. The term “historic fill site” has been used in other states. The term could then be defined as “...a landfill that was established before 1970 and which was not licensed by the Department as a landfill...”.